

INFRALIT EP/PE 8087-18

Epoxy/polyester powder

INFRALIT EP/PE 8087-18 is a powder coating based on a mixture of solid epoxy and polyester binders. At elevated temperature the powder will melt, cure and form the final paint film.



Suitable for coating metal industry products, such as lighting fixtures, apparatuses, wire gratings and refrigerating fixtures.

The mechanical and chemical resistance as well as the anticorrosive properties of INFRALIT EP/PE 8087-18 Epoxy/Polyester powder are almost equal to those of epoxies. On outdoor exposure INFRALIT EP/PE 8087-18 epoxy/polyester powder has a tendency towards matting down (chalking) similar to that of pure epoxies. On the other hand, its tendency to yellow on overbaking and exposure to heat and ultraviolet light is minor as compared with epoxy powders.

Among special properties of INFRALIT EP/PE 8087-18 are improved levelling and wide gloss range.

TECHNICAL DATA

Fields of application	Ceilings, Furniture, Household appliances, Interior doors, Indoor wall, Kitchen furniture, Machinery, Ship, Steel constructions
Recommended substrate	Aluminium, Steel, Zinc
Binder	Epoxy-polyester
Solids	100%
Practical spreading rate	6 - 12 m ² /kg depending on the film thickness.
Film thickness	Directive film thickness 60 - 100 µm. The optimal film thickness must be defined case-specifically by test applications. In some cases the film thickness might exceed the previously mentioned maximum value.
Colours	By agreement.
Gloss (60°)	20-30
Density	Approx. 1.4 - 1.7 kg/dm ³ depending on colour.
Storage	The storage life is minimum 18 months in dry and cool conditions when the temperature during storage and transportation is max. +25°C. Take special care during high temperature seasons. Avoid storing close to heat sources and heaters in trucks and storages. Don't store in direct sunlight. The recommended expiry date of the powder coating that has been stored according to the instructions is shown on the package label.
Packaging	20 kg.

DIRECTION FOR USE

Surface preparation

STEEL SURFACES: Remove grease and dirt. After that blast-cleaning at least to preparation grade Sa 2½ (ISO 8501-1) and/or a suitable chemical pretreatment.

ALUMINIUM SURFACES: Remove grease and dirt. After that chromating or alternatively a suitable chemical pretreatment.

HOT-DIP-GALVANIZED AND ZINC-ELECTROPLATED SURFACES: Remove grease, dirt and white rust by e.g. alkali wash. Depending on exposure conditions, chromating or alternatively a suitable chemical pretreatment is also required.

Application method

Tribo charging spray, Corona charging spray

Curing time

15 min/180°C (substrate temperature)

10 min/200°C (substrate temperature)

Curing time indicates the time needed for the curing of the coating.

Curing parameters and oven type may effect the colour and gloss of the coating.

The temperature of the powder coating has to reach the temperature inside the paint shop before the package is opened. The application properties may be deteriorated, if the temperature of the powder is lower than this.

HEALTH AND SAFETY

Safety and precaution measures

See safety data sheet.

The powder itself is non-flammable, but with air it can form an explosive mixture that in presence of adequate ignition energy ignites. The lower explosion limit of typical powder coatings is between 20 g/m³ and 80 g/m³ (CEPE, Safe Powder Coating Guideline 8th Edition, 2020). Ventilation of the spray booth should be adjusted so that the concentration of powder in the air is less than 50% of the lower explosive limit value. On calculation of the powder concentration in the spray booth, the powder deposited on the workpiece is not taken into account.

FILM PROPERTIES

Typical values

Substrate cold-rolled steel, curing time 15 min/180°C:

Bend test (Conical mandrel) SFS ISO 6860, mm	OK
Cross-cut test ISO 2409	GTO
Cupping ISO 1520, mm	7.0
Impact resistance, ISO 6272-2, direct, kgcm	40.0
Impact resistance, ISO 6272-2, reverse, kgcm	40.0
Pendulum damping test ISO 1522, s	180.0

Teknos Group Oy Takkatie 3, P.O.Box 107 FI-00371 Helsinki, Finland Tel. +358 9 506 091

The above information is normative and based on laboratory tests and practical experiences. The information is noncommittal, and we cannot accept liability for the results obtained under working conditions beyond our control, and consequently the buyer or the user is not released from the obligation to test the suitability of our products for specific means and application methods under the actual application conditions. Our liability covers only damage caused directly by defects in the products supplied by Teknos. This product is intended for professional use only. This implies that the user possesses sufficient knowledge for using the product correctly with regard to technical and working safety aspects. The latest versions of Teknos' Technical Data Sheets and Safety Data Sheets are available from our homepage www.teknos.com. All trademarks displayed on this document are the exclusive property of Teknos Group or its affiliated companies.